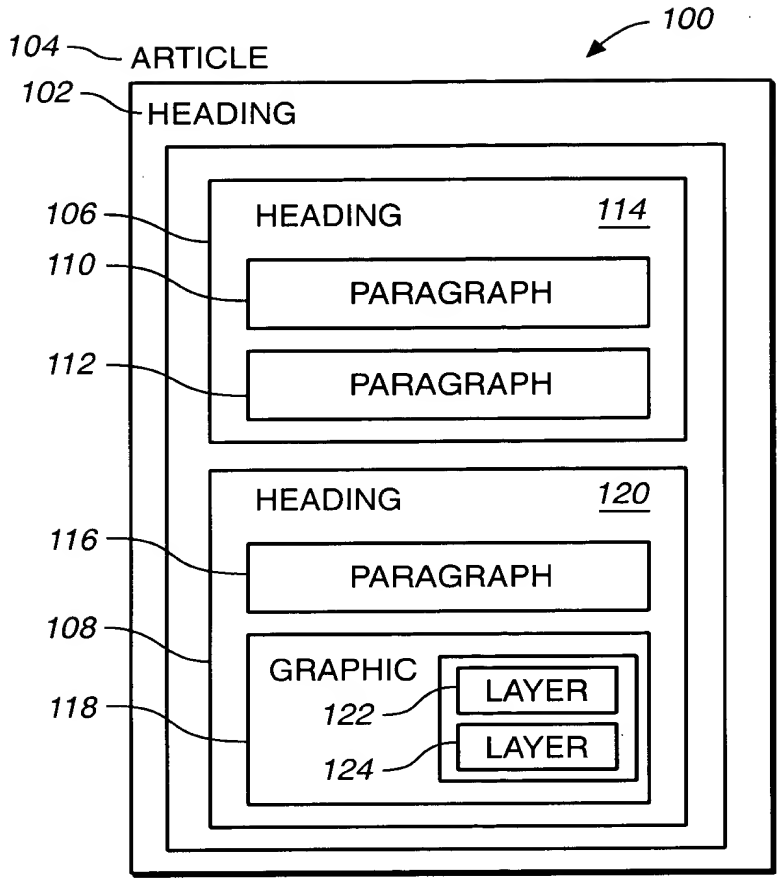
100
104
ARTICLE
102
HEADING
106
HEADING
114
110
PARAGRAPH
112
PARAGRAPH
HEADING
120
116
PARAGRAPH
108
GRAPHIC
118
122
LAYER
124
LAYER

FIG._1A

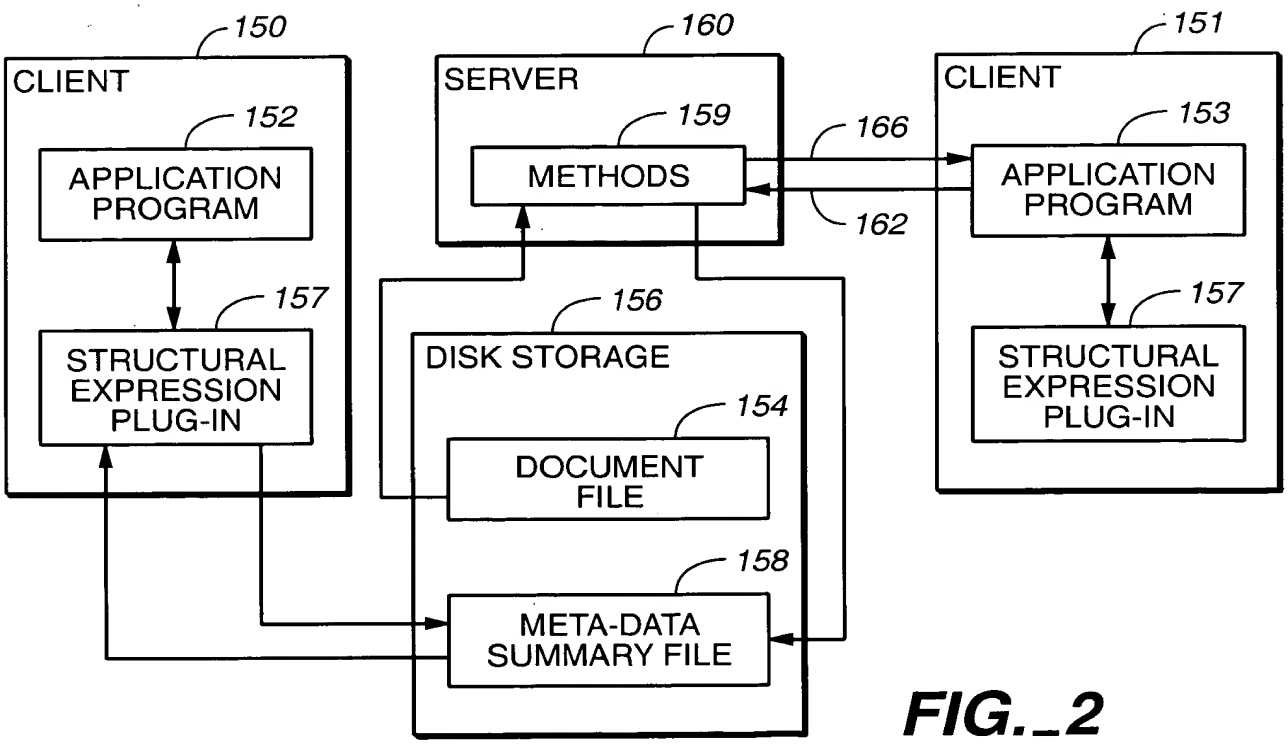
150
CLIENT
152
APPLICATION PROGRAM
157
STRUCTURAL EXPRESSION PLUG-IN
160
SERVER
159
METHODS
166
162
151
CLIENT
153
APPLICATION PROGRAM
157
STRUCTURAL EXPRESSION PLUG-IN
156
DISK STORAGE
154
DOCUMENT FILE
158
META-DATA SUMMARY FILE

FIG._2

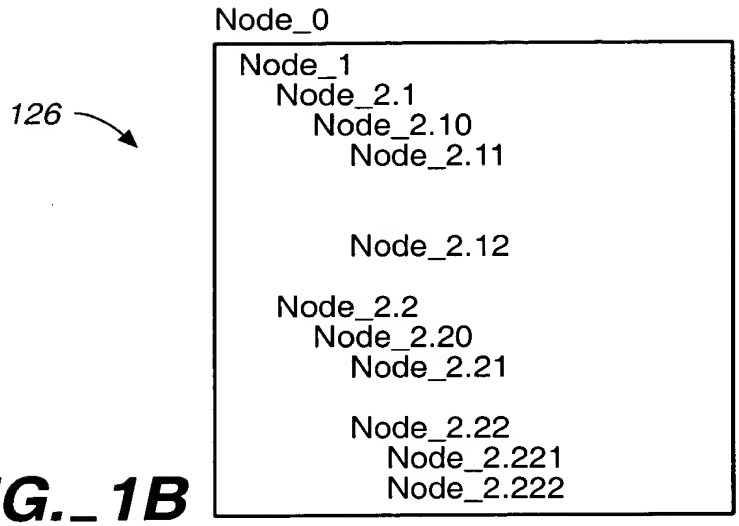

FIG._1B

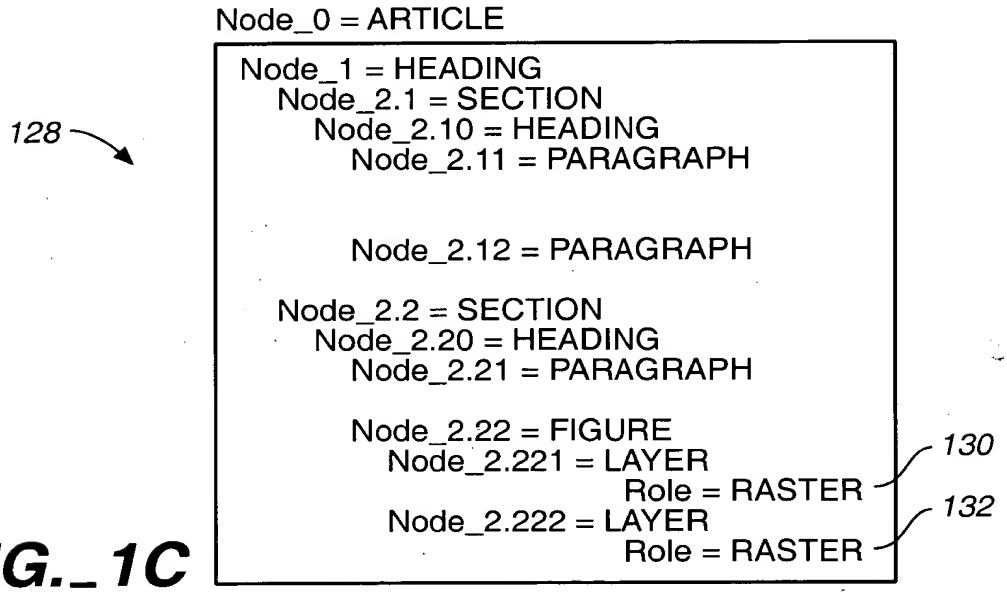

FIG._1C

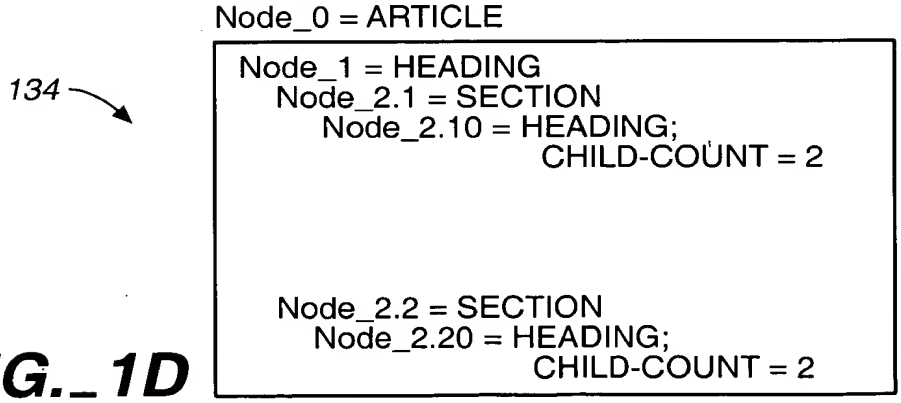

FIG._1D

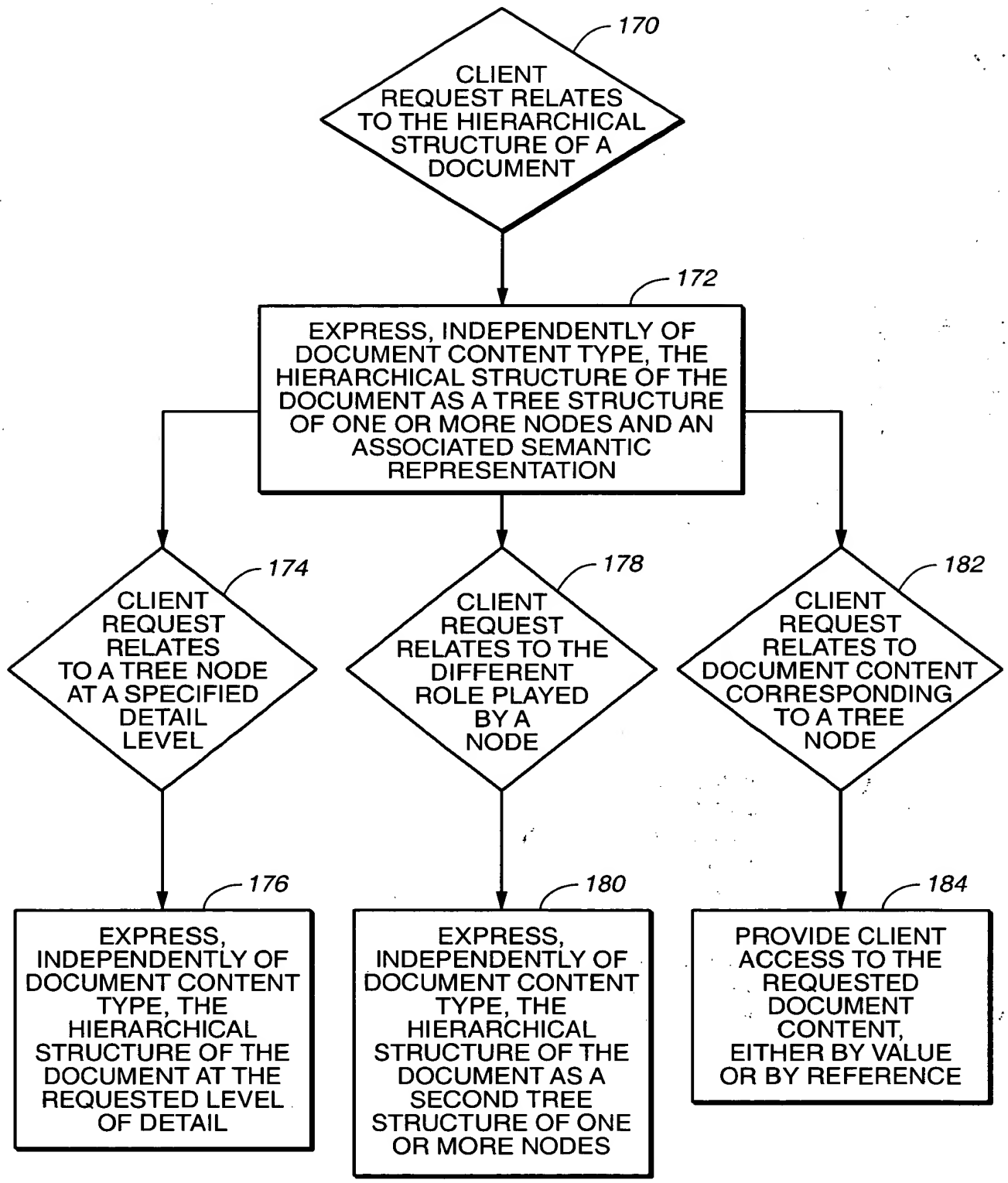
170
CLIENT REQUEST RELATES TO THE HIERARCHICAL STRUCTURE OF A DOCUMENT
172
EXPRESS, INDEPENDENTLY OF DOCUMENT CONTENT TYPE, THE HIERARCHICAL STRUCTURE OF THE DOCUMENT AS A TREE STRUCTURE OF ONE OR MORE NODES AND AN ASSOCIATED SEMANTIC REPRESENTATION
174
CLIENT REQUEST RELATES TO A TREE NODE AT A SPECIFIED DETAIL LEVEL
178
CLIENT REQUEST RELATES TO THE DIFFERENT ROLE PLAYED BY A NODE
182
CLIENT REQUEST RELATES TO DOCUMENT CONTENT CORRESPONDING TO A TREE NODE
176
EXPRESS, INDEPENDENTLY OF DOCUMENT CONTENT TYPE, THE HIERARCHICAL STRUCTURE OF THE DOCUMENT AT THE REQUESTED LEVEL OF DETAIL
180
EXPRESS, INDEPENDENTLY OF DOCUMENT CONTENT TYPE, THE HIERARCHICAL STRUCTURE OF THE DOCUMENT AS A SECOND TREE STRUCTURE OF ONE OR MORE NODES
184
PROVIDE CLIENT ACCESS TO THE REQUESTED DOCUMENT CONTENT, EITHER BY VALUE OR BY REFERENCE

FIG._3

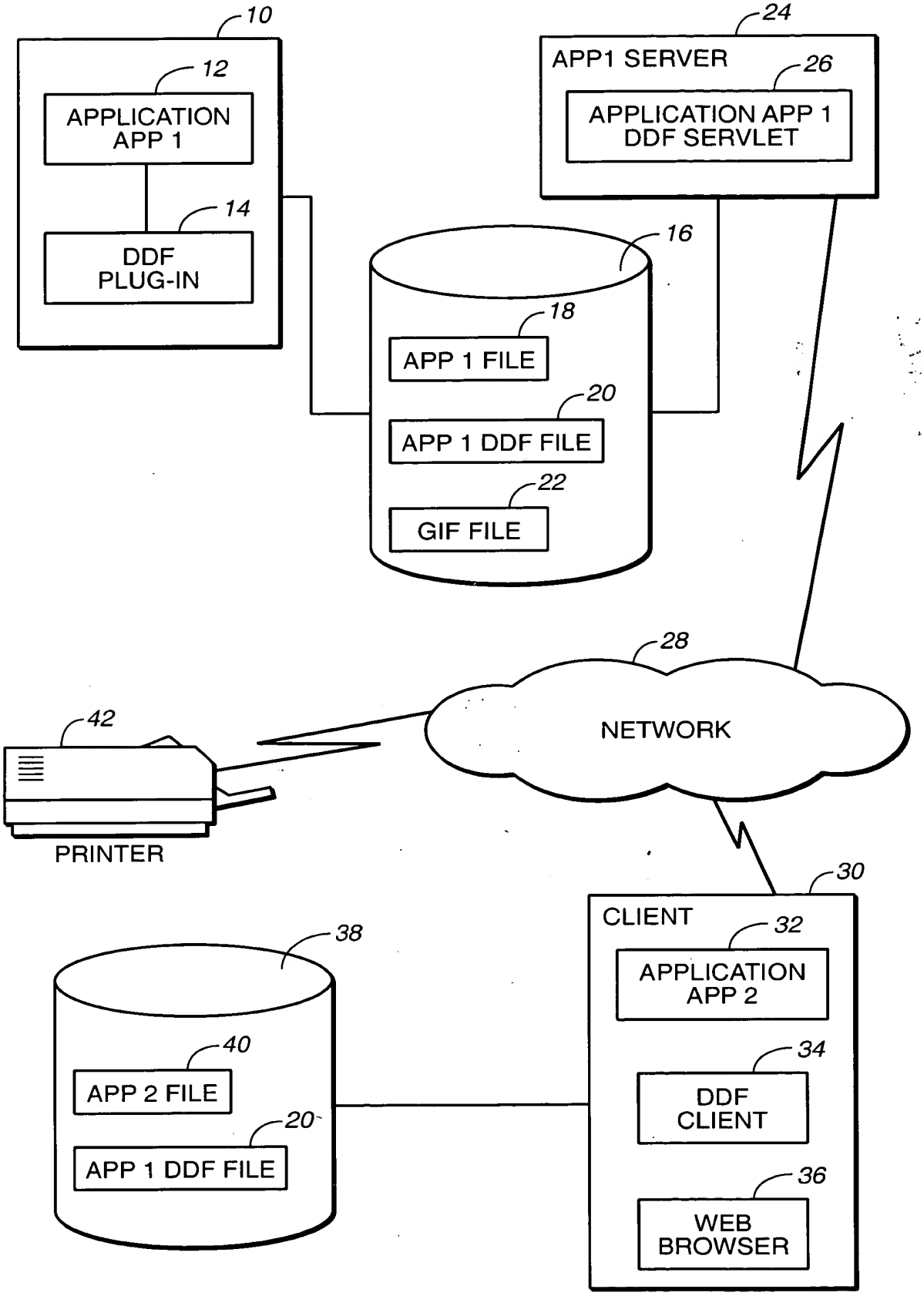
10
12
APPLICATION APP 1
14
DDF PLUG-IN
24
APP1 SERVER
26
APPLICATION APP 1 DDF SERVLET
16
18
APP 1 FILE
20
APP 1 DDF FILE
22
GIF FILE
28
NETWORK
42
PRINTER
30
CLIENT
32
APPLICATION APP 2
34
DDF CLIENT
36
WEB BROWSER
38
40
APP 2 FILE
20
APP 1 DDF FILE

FIG._4

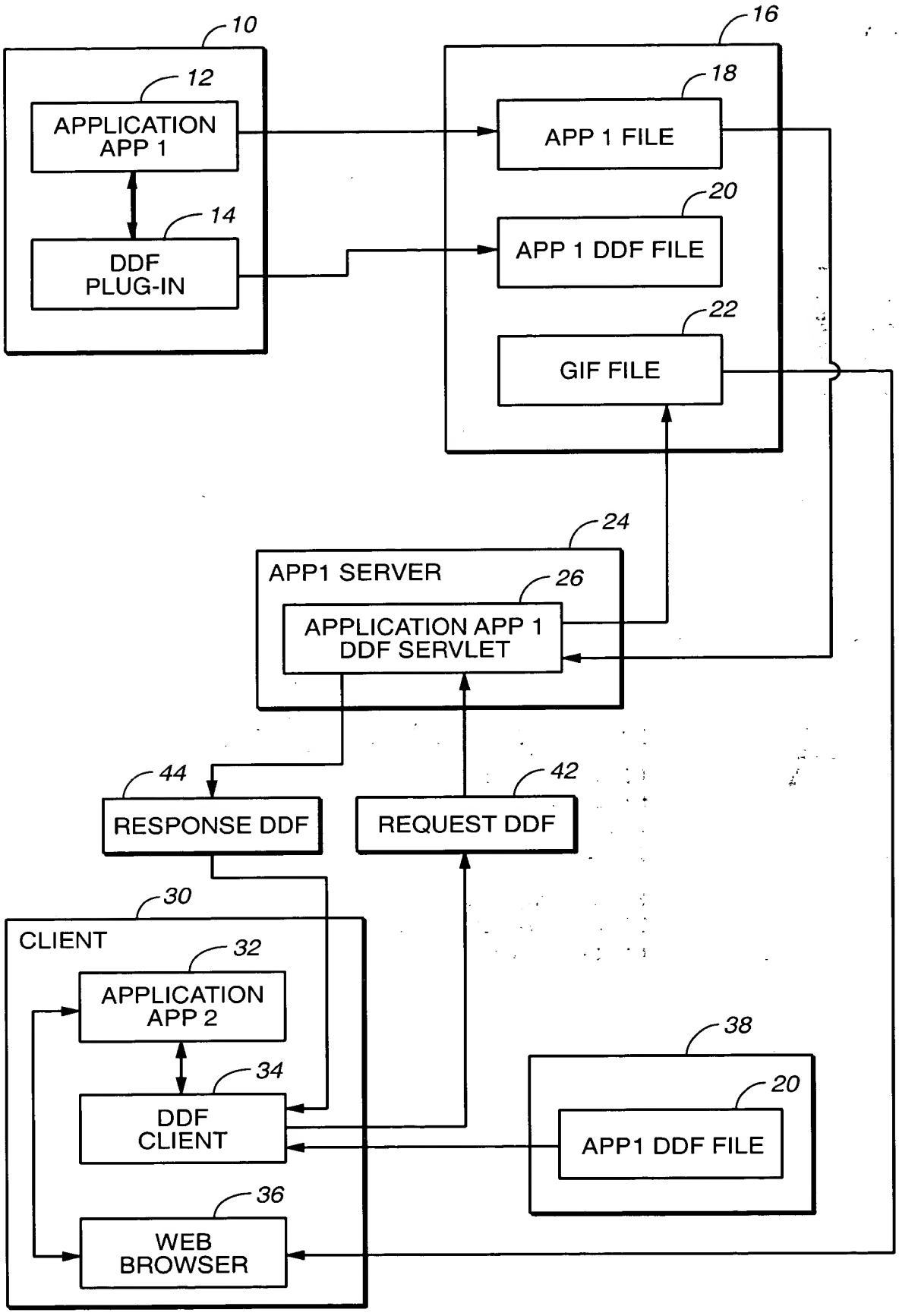
10
12
APPLICATION APP 1
14
DDF PLUG-IN
16
18
APP 1 FILE
20
APP 1 DDF FILE
22
GIF FILE
24
APP1 SERVER
26
APPLICATION APP 1 DDF SERVLET
44
RESPONSE DDF
42
REQUEST DDF
30
CLIENT
32
APPLICATION APP 2
34
DDF CLIENT
36
WEB BROWSER
38
20
APP1 DDF FILE

FIG._5

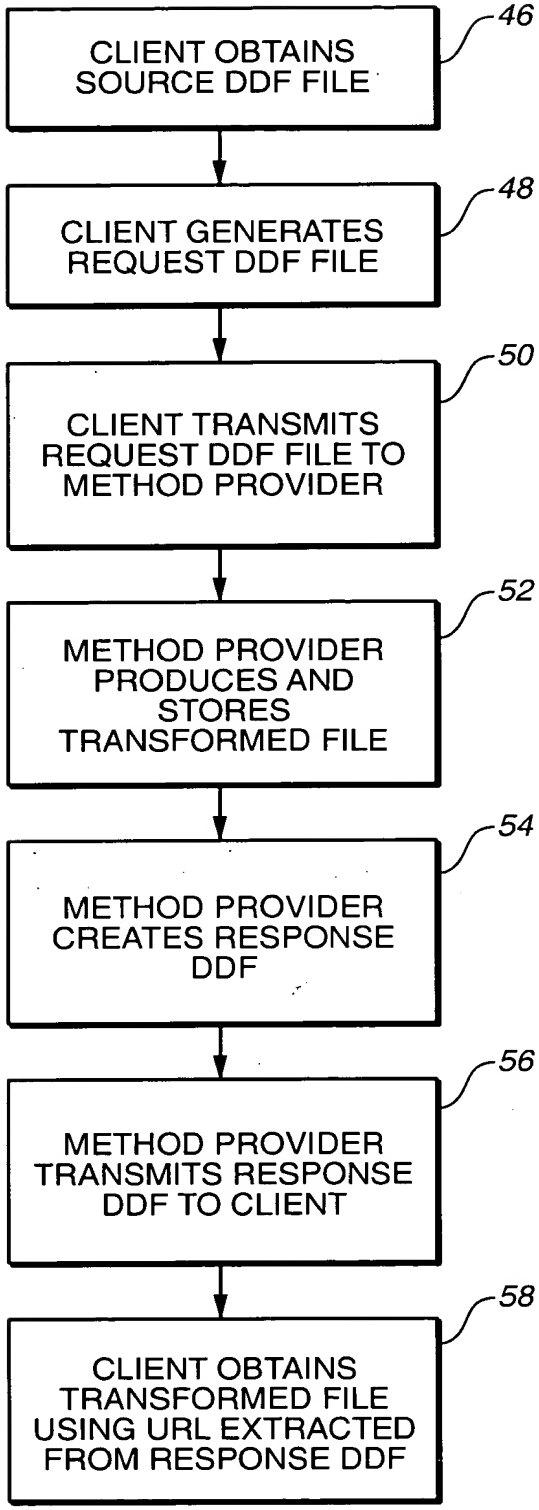
CLIENT OBTAINS SOURCE DDF FILE
46
CLIENT GENERATES REQUEST DDF FILE
48
CLIENT TRANSMITS REQUEST DDF FILE TO METHOD PROVIDER
50
METHOD PROVIDER PRODUCES AND STORES TRANSFORMED FILE
52
METHOD PROVIDER CREATES RESPONSE DDF
54
METHOD PROVIDER TRANSMITS RESPONSE DDF TO CLIENT
56
CLIENT OBTAINS TRANSFORMED FILE USING URL EXTRACTED FROM RESPONSE DDF
58

FIG._6

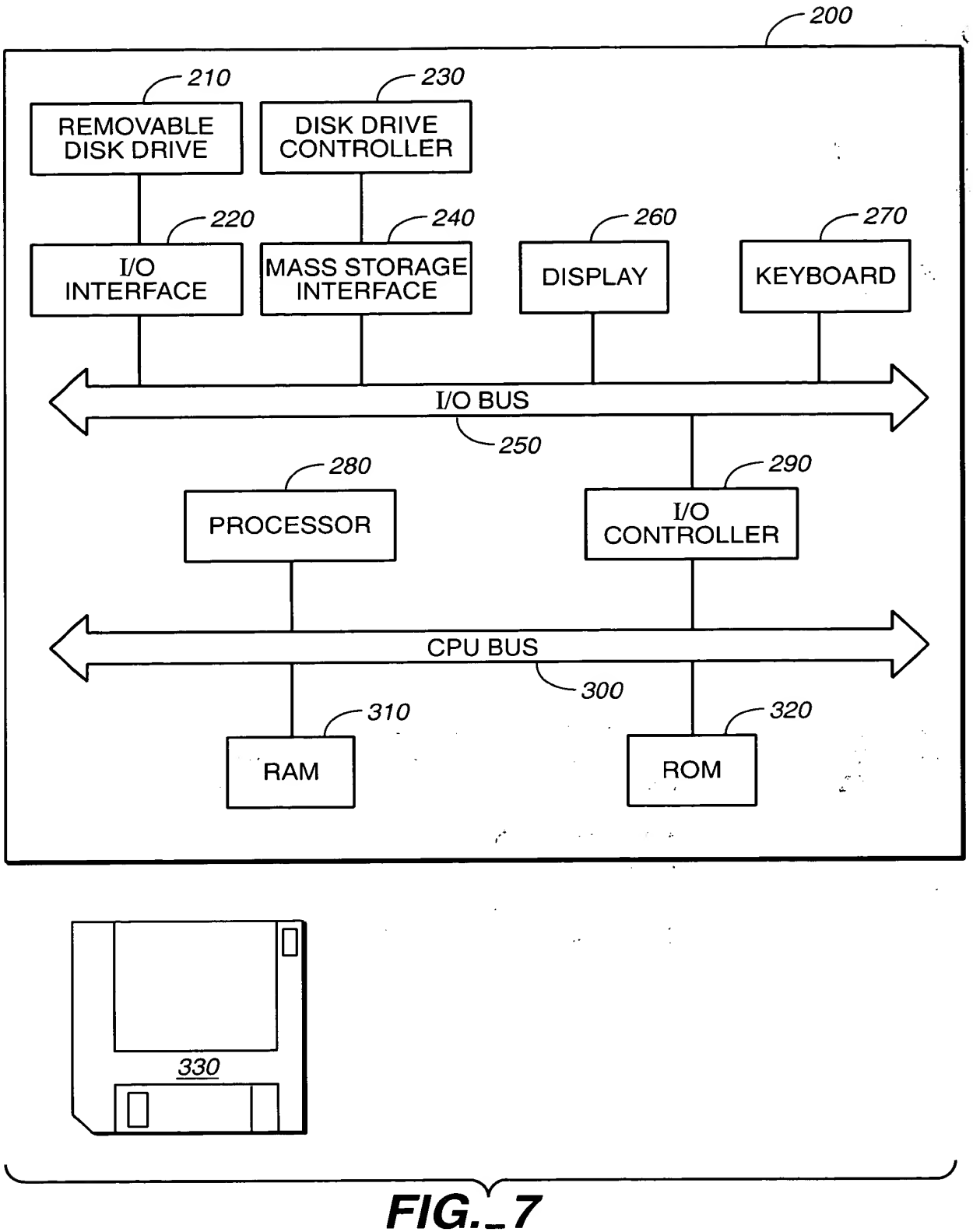
200
210
REMOVABLE DISK DRIVE
230
DISK DRIVE CONTROLLER
220
I/O INTERFACE
240
MASS STORAGE INTERFACE
260
DISPLAY
270
KEYBOARD
I/O BUS
250
280
PROCESSOR
290
I/O CONTROLLER
CPU BUS
300
310
RAM
320
ROM
330

FIG._7